U. S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

U.S. Department
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Pipeline and
Hazardous Materials
Safety Administration
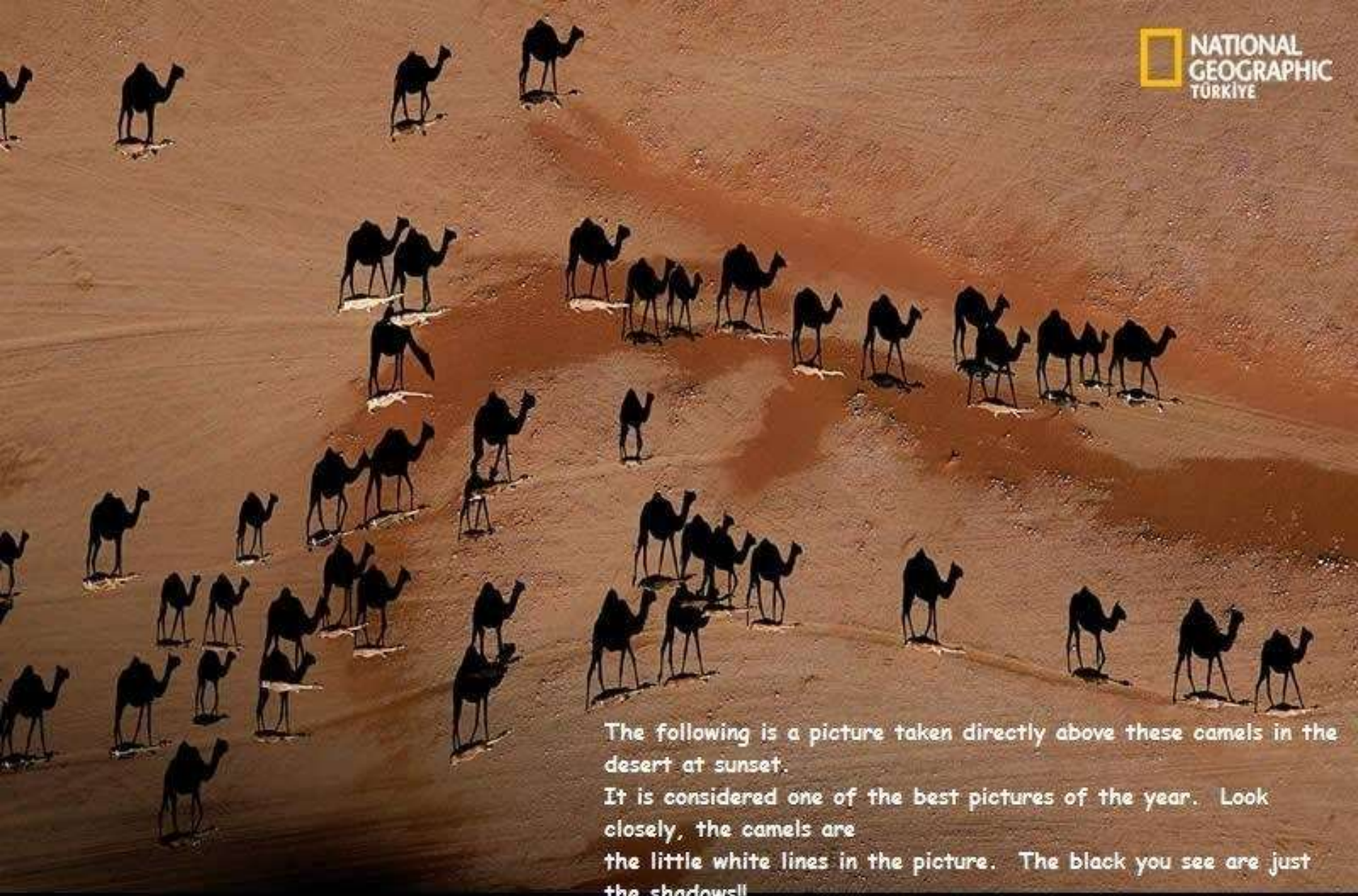
Pipeline Safety

Hazmat Safety

Thoughts for Consideration

Pipeline and Hazardous Materials Safety Administration
Community Assistance and Technical Services
Elizabeth Komiskey
Harold Winnie
2008

The following is a picture taken directly above these camels in the desert at sunset.

It is considered one of the best pictures of the year. Look closely, the camels are

the little white lines in the picture. The black you see are just the shadows!!

Presentation Topics

RP1162

- Process At the Region/State Level
- Workshop Comment
- 4 Supplemental Take Away Questions

Continuous Improvement Ideas

- Working Together:
  Damage Prevention & Public Awareness
- Effectiveness

RP1162 -The Region/State Level

ONLY FOR CLEARINGHOUSE SUBMISSIONS:

➢ **Operator Response to Comments Reviewed**
  - ➢ Acceptable
  - ➢ Unacceptable

➢ **May Occur This Year**
  - ➢ Central Region, Information on Region Response Passed to Inspectors, Emphasis Identified if necessary
  - ➢ States

➢ **II Future**
  - ➢ Webcast information
  - ➢ http://primis.phmsa.dot.gov/comm/PublicAwareness Workshops.htm

RP1162
Overwhelming Information

➢ **Comment from Workshop –**

   TOO MUCH INFORMATION

➢ **For Consideration:**

   ➢ Timing of mailing reviewed

   ➢ 7-8 times to retain

   ➢ Is it all required in one mailer?

   ➢ Check for duplicates or more

   ➢ **Multiple Titles & Same Name & Same Address**

   ➢ **Multiple Companies, Same Name & Same Information**

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Pipeline and Hazardous Materials Safety Administration

Pipeline Safety

Hazmat Safety

RP1162 Supplemental Programs Key Questions

➢ **Questions:**

➢ Can you explain process to others?

➢ Can an employee understand the process?

(Hint: Did you test it?)

➢ When are the 12 elements reviewed?

➢ What triggers which activity with whom?

Continuous Improvement Ideas

REMEMBER:

➢ **Ideas Only**

➢ **Purpose is to Foster Process Improvement and Discussion**

➢ **Idea is not Synonymous with Expectations**

➢ **Continuous Improvement may not mean a trend upwards every time**

➢ **An Operator May Find Value in All or Some of These Suggestions**

Continuous Improvement Ideas

➢**Remember the PSIA2002?**

➢Self-Evaluations

➢Actions to Demonstrate:
Document improved areas
(management support:
>$$$, >resources, >vendors,
>publications,>activities,...)

Continuous Improvement Ideas

➢ **Is the information getting where it should?**

  ➢ School

  ➢ Emergency Notified by Public Official, Public Official Notified by Public

  ➢ Actions to Demonstrate:

  Document follow-up and results to these specific type of calls (contact list updates, procedures, etc)

Continuous Improvement Ideas

➢ **Who in the Organization Should Know About This Information (Section 2.4.7)?**

- ➢ Emergency Responder and Public Official Contacts
- ➢ 800 numbers and delay
- ➢ Moving a meter and Leak
- ➢ Actions to Demonstrate:

  Document improved process, procedures, training activities and sharing of information

Continuous Improvement Ideas

Tracking to make a difference?

> Can you query data in a meaningful way?

> *Excavators and Contact with the Pipe*

> *Excavators and One-Call tickets,*

> *One-Call tickets and locators*

> Actions to Demonstrate:

- Query repeat offenders for hits,
- Query repeat offenders for excavation without a valid one-call ticket,
- Query bad locates.
- Document your process to follow-up on the queried data.

> Track further information.

Continuous Improvement Ideas

➤ **Can you query data in a meaningful way?**

  ➤ Clearing issue

  ➤ Action to Demonstrate: Review mailing method and work to identify whether or not this is an issue

Continuous Improvement Ideas

➢ **How are we targeting who THEY trust?**

➢ Home information

➢ Action to Demonstrate:
The meter reader, business extensions through employees, …

U.S. Department
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**Pipeline and
Hazardous Materials
Safety Administration**

Pipeline Safety

Hazmat Safety

<u>Continuous Improvement Ideas</u>

➢ **Converting Existing Resources and Valid Data into Action**

➢ Action to Demonstrate:

Use A Different Perspective, Review and Document:

- ➢ Aerial Patrols
  - Repeat Locations
  - Seasonal Activity
- ➢ Customer Service Departments/Rate Changes
- ➢ Meter Readers and Opportunities
- ➢ Developer and City Calls to Engineering Departments
- ➢ Incident/Accident Reports and Follow-up
- ➢ 800 Calls and Follow-up
- ➢ Complaints and Resolution
- ➢ New Pipeline Construction and Contacts
- ➢ ROW Management Data

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Continuous Improvement Ideas
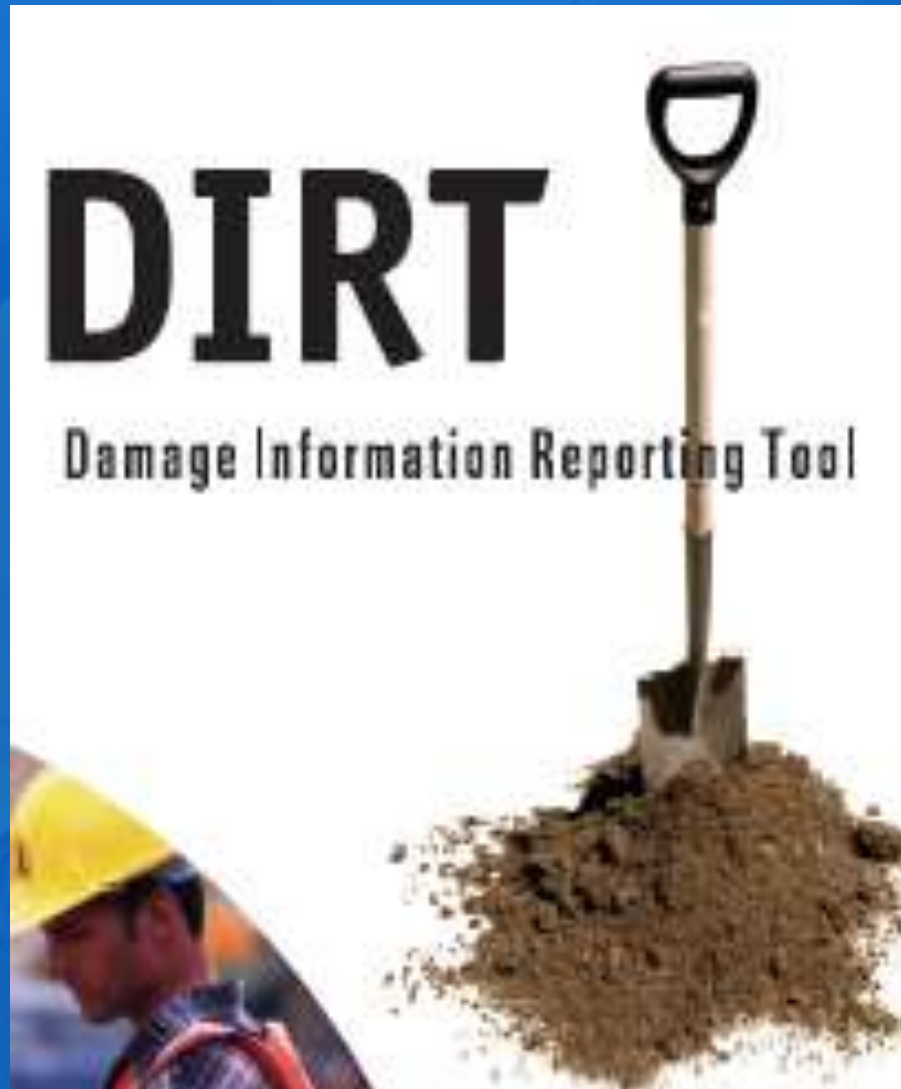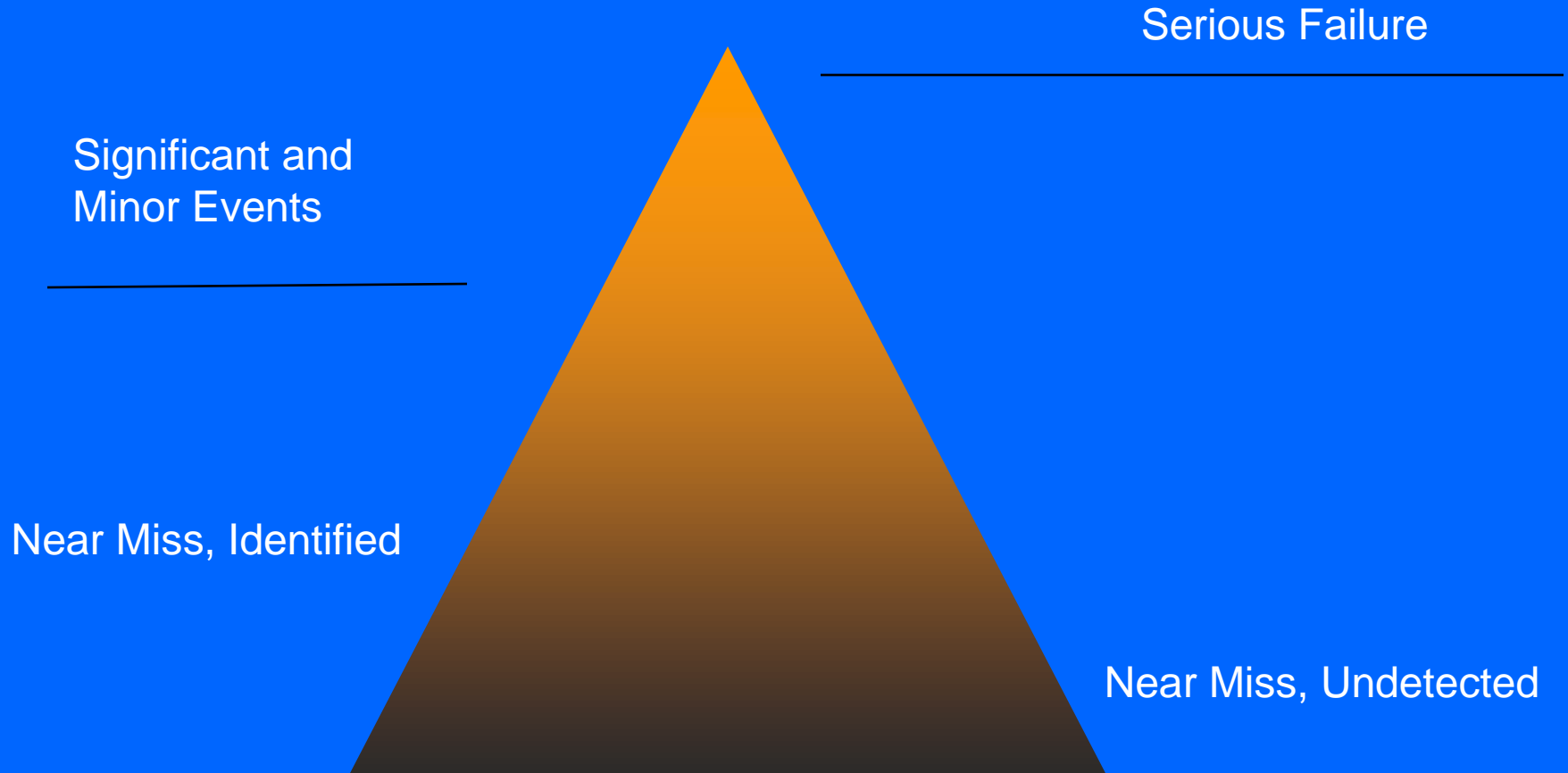
➢ **Trend Items that Can Help You Too!!**

  ➢ Locates and No Response Tickets
  ➢ Excavators that did not place a ticket
  ➢ Near Miss Events

  ➢ Action to Demonstrate: Follow-up (ask why), document numbers and changes in procedures or contracts, document sharing of information and how you have improved a process

CGA Data Reporting & Evaluation Committee

Safety Pyramid

Serious Failure

Significant and
Minor Events

Near Miss, Identified

Near Miss, Undetected

Identifying Near Miss information can help assure that situations don't climb the
pyramid to become Significant Events or Serious Failures

Continuous Improvement Ideas

➢ **DIRT DATA**

- ➢ DQI
- ➢ Local Versus National

- ➢ Action to Demonstrate: Follow-up (ask why), use the power query wizard, look at local versus national data, document changes and how you have improved compared to local, national data and how DQI index has improved.

Data Quality Index

- **Data Quality Index (DQI). The DQI is intended to provide DIRT users with a measure of the completeness and/or quality of the data it submitted, based on the required data fields using selections other than DNC or U/O.**

- **To encourage individual stakeholders to align their data collection processes with DIRT.**

- **More complete information results in more effective analysis of the entire data set.**

- **Historical DQI's will measure improvements of data submissions for each individual or organization submitting to DIRT**
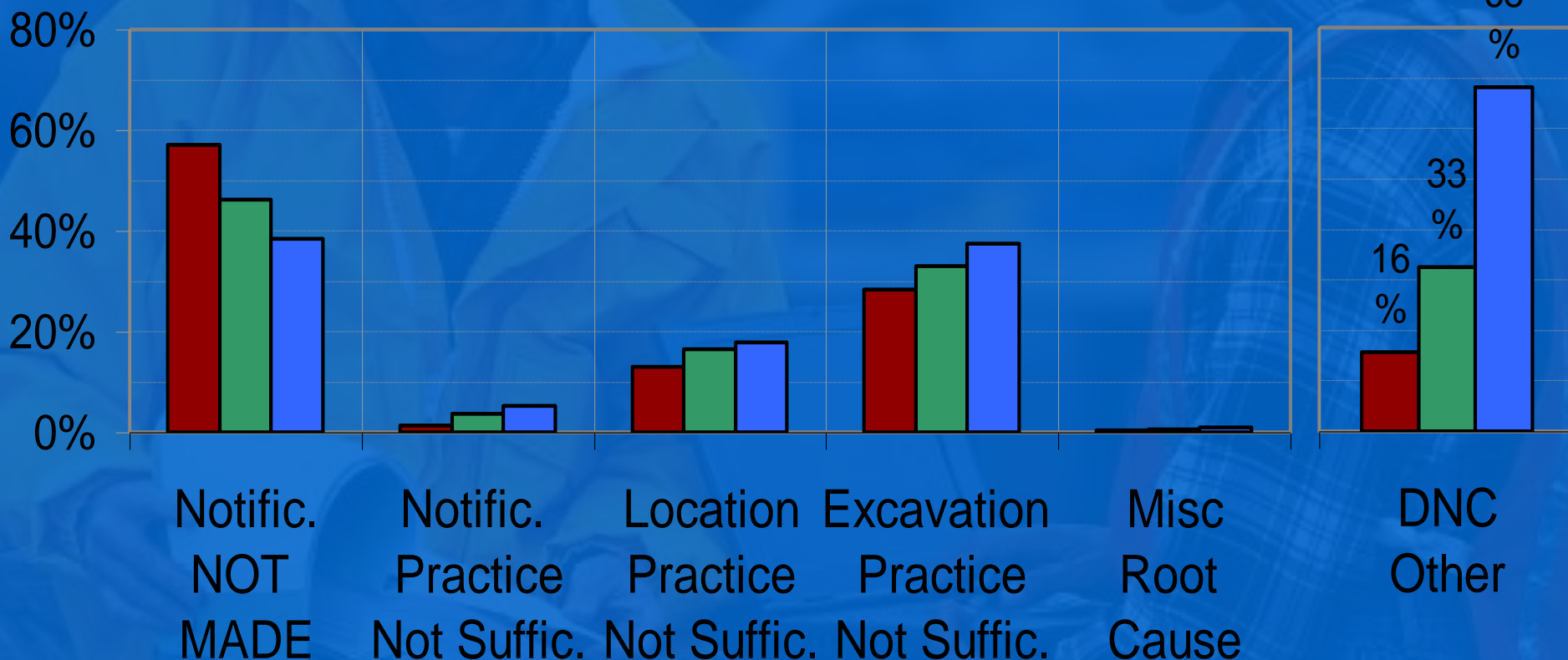
CGA
Common Ground Alliance

Events by Root Cause

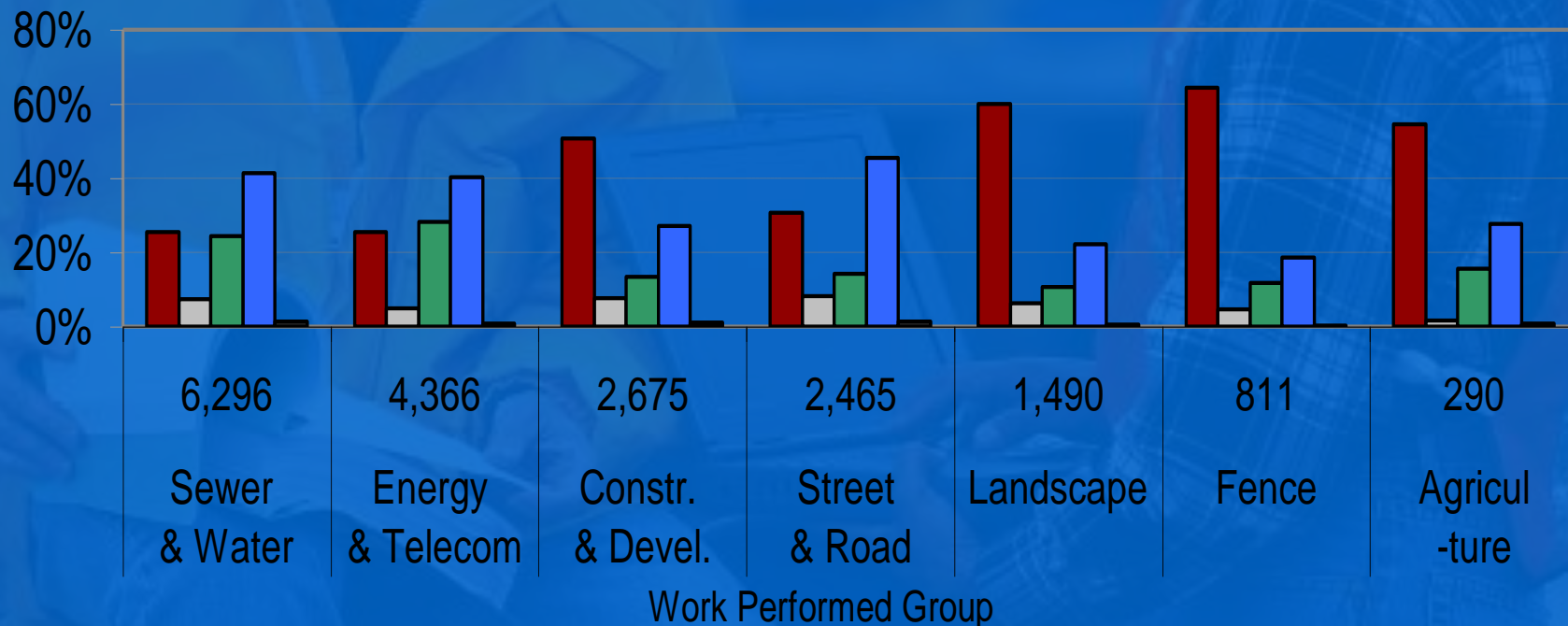

Share of known events by root cause

Professional Excavators

Chart 9

2006 Contractor, Developer, Utility - 18393 of 31153 (59% Known Data)

Share of Known Root Cause for Known Work Performed

- 🟥 Notification NOT MADE
- ⬜ Notification Practice Not Sufficient
- 🟩 Location Practice Not Sufficient
- 🟦 Excavation Practice Not Sufficient
- ⬛ Miscellaneous Root Cause

Work Performed Group						
6,296	4,366	2,675	2,465	1,490	811	290
Sewer & Water	Energy & Telecom	Constr. & Devel.	Street & Road	Landscape	Fence	Agricul-ture

Damage Prevention
is a Shared Responsibility.
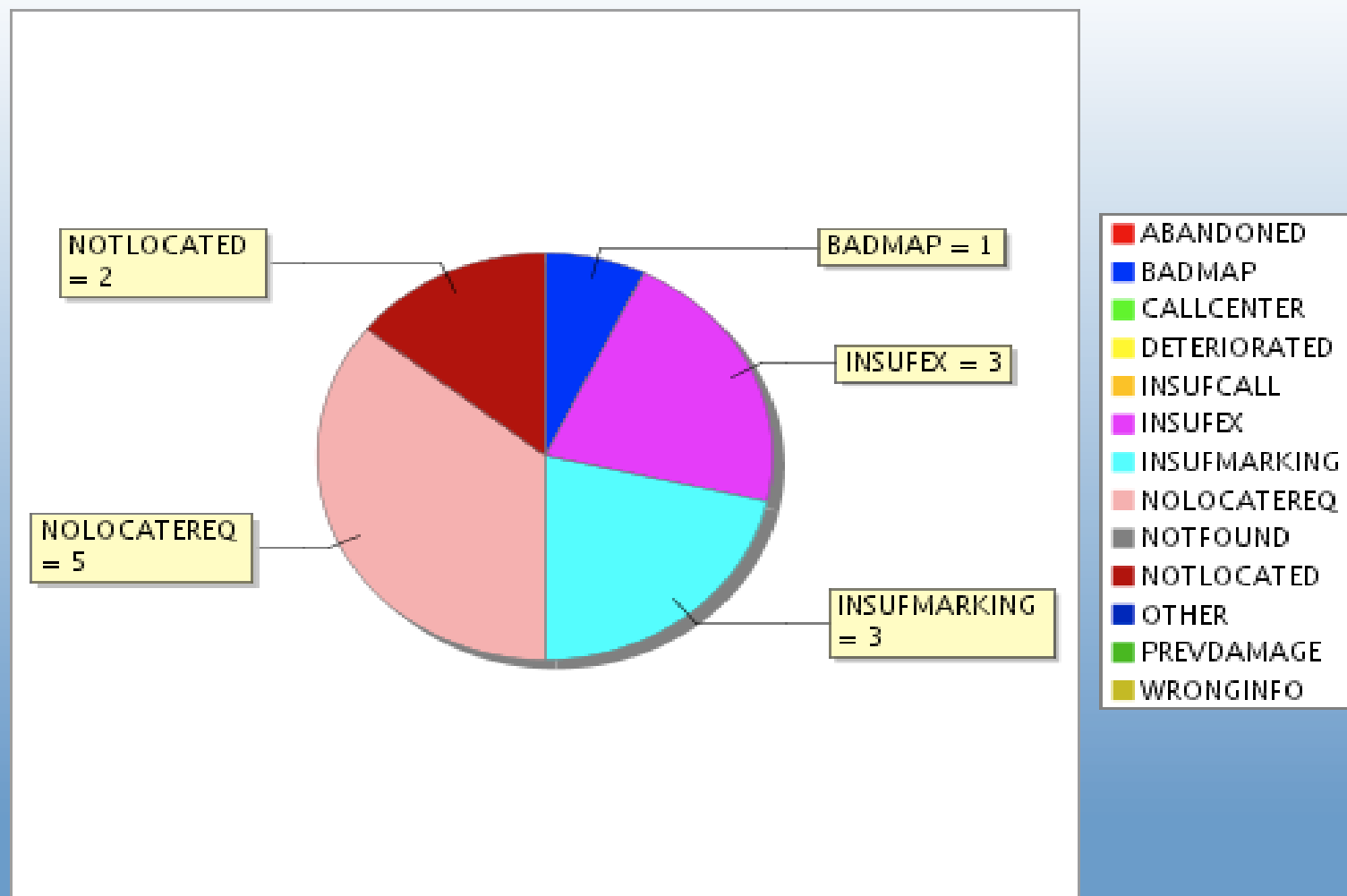
CGA
Common Ground Alliance

Report: **RPT03: Breakdown by Category - Pie**   Time Period: 01/01/2005 to 06/20/2005
Data Set: ALL data in system, reported by App Admin   Report Run: 2005-06-21 00:08:50 MDT

Root Cause of damage

NOTLOCATED = 2
BADMAP = 1
INSUFEX = 3
NOLOCATEREQ = 5
INSUFMARKING = 3

ABANDONED
BADMAP
CALLCENTER
DETERIORATED
INSUFCALL
INSUFEX
INSUFMARKING
NOLOCATEREQ
NOTFOUND
NOTLOCATED
OTHER
PREVDAMAGE
WRONGINFO

Damage Prevention
is a Shared Responsibility.

CGA
Common Ground Alliance

Food For Thought

- **Problem Statement: The Washington Monument was disintegrating Why?**
  - *Use of harsh chemicals*
- **Why?**
  - *To clean pigeon poop*
- **Why so many pigeons?**
  - *They eat spiders and there are a lot of spiders at monument*
- **Why so many spiders?**
  - *They eat gnats and lots of gnats at monument*
- **Why so many gnats?**
  - *They are attracted to the light at dusk.*

- **Solution:** *Turn on the lights at a later time.*

Continuous Improvement Ideas

➢ **Review Presentations Used**

➢ Do the pictures speak?

➢ Do you see what you should?

➢ Are you using the Data to improve or grab attention?

➢ Action to Demonstrate:

➢ Record changes made

   ➢ *to presentations by stakeholder group*

   ➢ *to provided information*

   ➢ *indicate why or what is being tested.*
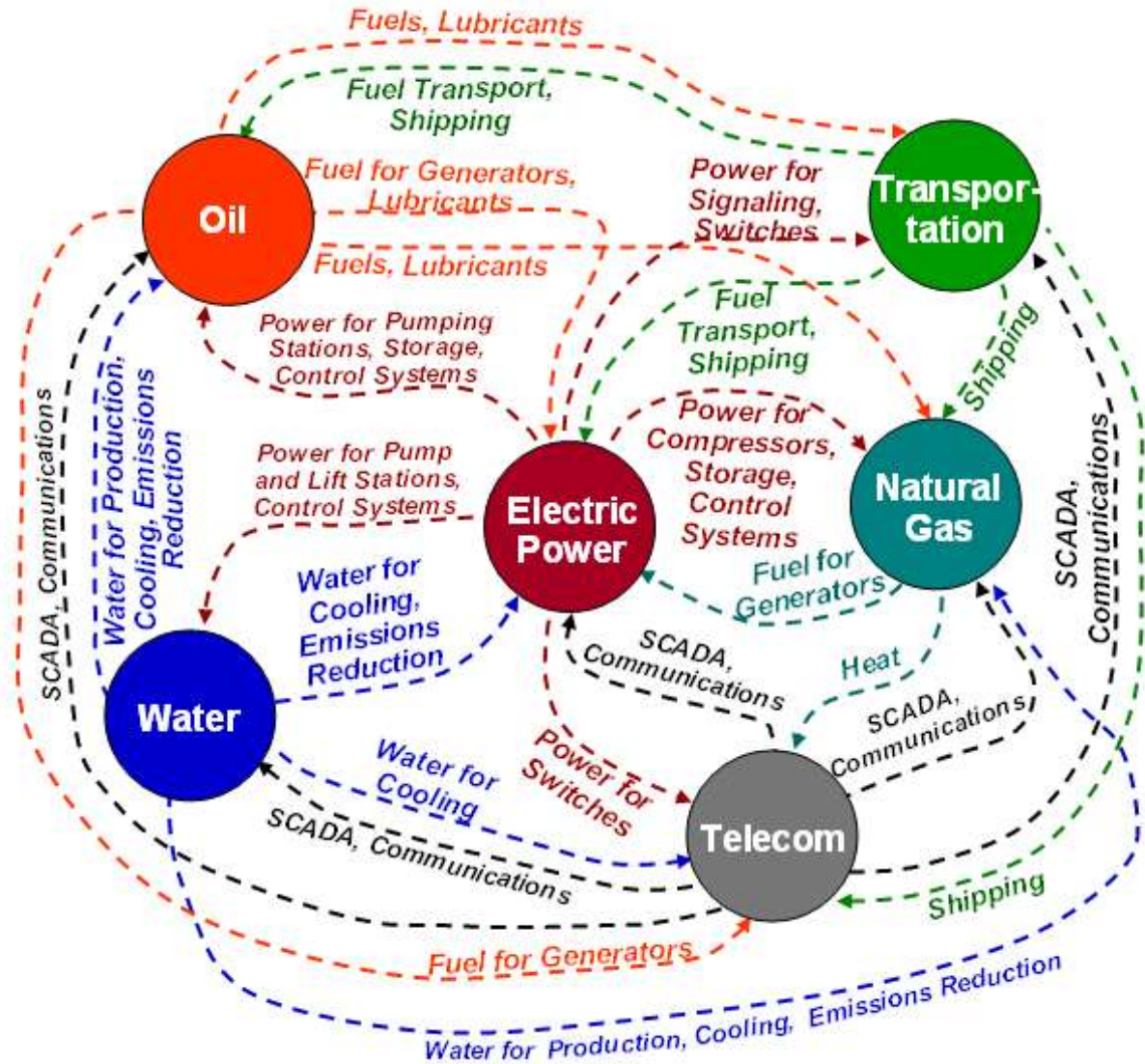
The National Pipeline System

Infrastructure Interdependencies

bution Piping

Dresser Coupled
Gas Pipeline

Water Main

Broken Fitting

Electrical Conduit

Leak

Continuous Improvement Ideas

- **Remember the PSIA2002?**
- **Is the information getting where it should?**
- **Who in the Organization Should Know About This Information (Section 2.4.7)?**
- **Tracking to make a difference?**
  - Can you query data in a meaningful way?
- **How are we targeting who THEY trust?**
- **Converting Existing Resources and Valid Data into Action**

Continuous Improvement Ideas

➢ **Trend Items that Can Help You Too!!**

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➢ **DIRT DATA**

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➢ **Review Presentations Used**

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  ➢ Are you using the Data to improve or grab attention?

Program Evaluation

❖ **Assessment of Program Implementation**

❖ **Measuring Program Effectiveness**

Program Development and Documentation

- **Has the Public Awareness Program been developed and written to address the objectives, elements and baseline schedule?**

- **Does the operator have a written Public Awareness Program?**

- **Have all of the elements been incorporated into the written program?**

- **Does the written program address all of the objectives?**

- **Does the documented program address regulatory requirements and other regulatory requirements that the operator must comply with?**

- **Does the operator have a plan that includes a schedule for implementing the program?**

- **Does the program include requirements for updating responsibilities as organizational changes are made?**

Program Implementation

- **Has the public awareness <u>plan been implemented and documented</u> according to the written plan?**
- **Is the program <u>updated and current with any significant organizational or major new pipeline system changes</u> that may have been made?**
- **Are <u>personnel assigned responsibilities</u> in the written program <u>aware of their responsibilities</u> and have <u>management support (budget and resources)</u> for carrying out their responsibilities on the program?**
- **Has the program implementation been <u>properly and adequately documented?</u>**
- **Have all <u>required elements of the program plan been implemented in accordance</u> with the written plan and schedule?**
- **Does the operator have <u>documentation of the results of evaluating the program for effectiveness</u>?**
- **Are the results of the evaluation of program effectiveness <u>being used in a structured manner to improve the program</u> or determine if supplemental actions (e.g. revised messages, additional delivery methods, increased frequency) in some locations?**

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Measuring Program Effectiveness

Outreach: Percentage of Each Intended Audience Reached with Desired Messages –

- **Supplemental Measures Track the number of inquiries by phone to operator personnel.**

- **Track input received via feedback postcards (often called reply or bounce-back cards) from representatives of the stakeholder audience at events or meetings, sent by mail, or as a result of the operator's canvassing of the rights-of-way.**

- **Track the number of officials or emergency responders who attend emergency response exercises (this is an indicator of interest and the opportunity to gain knowledge).**

Desired Behaviors by the Intended Stakeholder Audience – Supplemental Measures

- **Whether excavators are following through on <u>all safe excavation practices</u>, in addition to calling the One-Call Center.**

- **The number of notifications received by the operator from the excavation One-Call Center (e.g., is there a <u>noticeable increase following distribution</u> of public awareness materials?).**

- **An assessment of <u>first responder behaviors</u>, including the response to pipeline-related calls, and a post-incident assessment to determine whether their actions would be and were consistent with the key messages included in the public awareness communications. Assessments of actual incidents should recognize that each response would require unique on-scene planning and response to specifics of each emergency.**

- **Measuring the <u>appropriateness of public stakeholders' responses</u> is also anecdotal but could include tracking whether an actual incident that affected residents was correctly identified and whether reported and personal safety actions undertaken were consistent with public awareness communication.**

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SURVEY FOR EMERGENCY OFFICIALS

Do you know where the nearest hazardous liquid or gas pipeline is in or near your community?

Do you know the name of your local pipeline operator?   YES   NO

If yes, who?   _____

Do you know the telephone number to call at -------------- if there is an incident, or if you need more information?   YES   NO

Have you seen, heard, or received any information regarding pipeline safety in any media in the last year?   YES   NO

If yes, do you recall what?   _____

Have you or anyone else in your department, to your knowledge, met with any representatives of ---------------- to discuss pipeline safety within the last 12 months, prior to today?   YES   NO

If yes, when?   _____

With whom?   _____

Do you have a response plan or SOPs for responding to a pipeline incident, such as a break?   YES   NO

Have you done any practical training to deal with a break?   YES   NO

Do you know if there were any pipeline incidents within the last ten years in your community?   YES   NO

If yes, about when?   _____

What was the incident?   _____

Did the pipeline company respond?   YES   NO

If yes, do you feel the pipeline company dealt with the incident in a satisfactory manner?

Has ----provided you with enough information about their pipeline? YES   NO

Comments

SIGNATURE: _____   TITLE: _____

DATE: _____

SURVEY FOR AFFECTED PUBLIC

In the last year, have you seen or heard any information from ------ relating to pipeline safety? YES NO

Written material (brochure, flyer, handout) Newspaper ad or article Face-to-face meeting Posted information (e.g., on or near pipeline)

Do you live close to a hazardous liquid or gas pipeline?

YES NO DO NOT KNOW

What would you do in the event you were first to see damage to a pipeline?

Call 911 Call pipeline operator Flee area Nothing (not my responsibility) Other:
_____

What would you do if you saw someone intentionally trying to damage a pipeline?

Call 911 Call pipeline operator Flee area Nothing (not my responsibility) Other:
_____

Have you ever called -----------, 911, or anyone else to report suspicious or worrisome activity near a pipeline? YES NO

Have you or has anyone in your household ever encountered a damaged pipeline or product released from a pipeline? YES NO

Do you agree or disagree that ----------------- has been doing a good job of informing people like you about pipeline safety?

Strongly agree Agree Disagree Strongly disagree

If you disagree, why?

Comments

SIGNATURE: _____ _DATE: ____

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SURVEY FOR PUBLIC OFFICIALS

Do you have a hazardous liquid or gas pipeline running through your community?

           YES   **NO**

Do you know the name of your local pipeline operator?

           YES   **NO**

Have you heard or seen a message regarding pipeline safety in the last 12 months?

           YES   **NO**   **If yes, how many? _____**

Before today, about when was your last contact with someone from --------------------
        Company related to pipeline safety?   **_____**

Do you know the telephone number to call at --------------------- Company if there is an
        incident or you need more information?   **YES**   **NO**

Do you know what precautions an excavator should take prior to digging to avoid
        accidentally hitting a pipeline?   **YES**   **NO**

If yes, what are they? _____

Are you familiar with the one-call requirements?   **YES**   **NO**

How would you rate the adequacy of information you have about pipeline safety (e.g., how to
        recognize a leak, what to do where there is a leak, what first responders should do,
        etc.)?About right Too much Not enough

Does your community have an emergency response plan to deal with a pipeline break?

                YES   **NO**

Are you aware of any pipeline breaks that occurred in your community in the last 10 years?

               YES   **NO**

Have any of your local citizens or businesses expressed concern in the last 12 months about
        any issues regarding pipeline safety?   **YES**   **NO**

Comments

SIGNATURE: _____ TITLE: _____

DATE: _____

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SURVEY FOR EXCAVATORS

In the last 12 months, have you been contacted or received written information from ----- regarding pipeline safety?   YES   NO

If yes, what was the source:

Telephone call Mail Visit or in-person meeting E-mail Sign or billboard Other: _____

Have you contacted ---- or One-call in the past year to inquire about the location of the pipelines?   YES   NO

If yes, how many times?   _____If yes, how did you make the contact?

Telephone call, E-mail, Letter, In-person, Other: _____

How often would you say your equipment operator checks whether a pipeline exists before digging in a new spot?

Always, Usually, Sometimes, Rarely, or Never, Don't know

If not always, why not?

Didn't know where to get information, Not necessary, Didn't think about it, Takes too much time, Think we can tell where pipeline is on our own, Other: _____

How do you make sure that all the right people in the company get the information on whom to call before digging? That is, how do you disseminate the information?

Post it, Discuss in meetings, E-mail, Calls, Put in company's written procedures, Put in company newsletter, Other:

_____

Excavator (Cont.)

How many of them probably have information on where to call before digging?

Has your company ever unexpectedly encountered a pipeline while digging?

<div align="center">

YES   **NO**

</div>

If yes, how often has this occurred? _____

If yes, how many were "close calls"? _____

How many resulted in damage? _____

Comments

SIGNATURE:_____

NAME OF COMPANY:_____

DATE: _____

SUMMARY OF EVALUATION PROCESS

Evaluation Approaches	Evaluation Techniques	Recommended Frequency
Self Assessment of Implementation	Internal review	Annually
Evaluation of effectiveness of program implementation: Outreach Level of knowledge Changes in behavior Bottom-line results	Survey operator-designed and conducted survey	No more than four years apart.
Implement changes to the PAP	Responsible person as designated in written PAP	As required by findings within 12 months of evaluation

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Continuous Improvement Ideas

Just because we have done it that way,

Does not mean it is the best use of $$$$$$ and Resources

Things People Do

ME
FIRST

And the **SURGEON GENERAL** says . .

THE ROANOKE TIMES
Monday, September 20, 2004

STEPHANIE KLEIN-DAVIS I The Roanoke Times

Mellisa Williamson, 35, a Bullitt Avenue resident, worries about the effect on her unborn child from the sound of jackhammers.

Diversionary tactic.

U.S. Department

Ladies and gentlemen, this is the captain speaking. Firstly, I'd like to thank you for choosing to fly Mandarin Airlines. As we taxi out to the runway please make yourself comfortable... and for those of you sitting on the right side of the plane... please look to your LEFT !

Words of Wisdom.
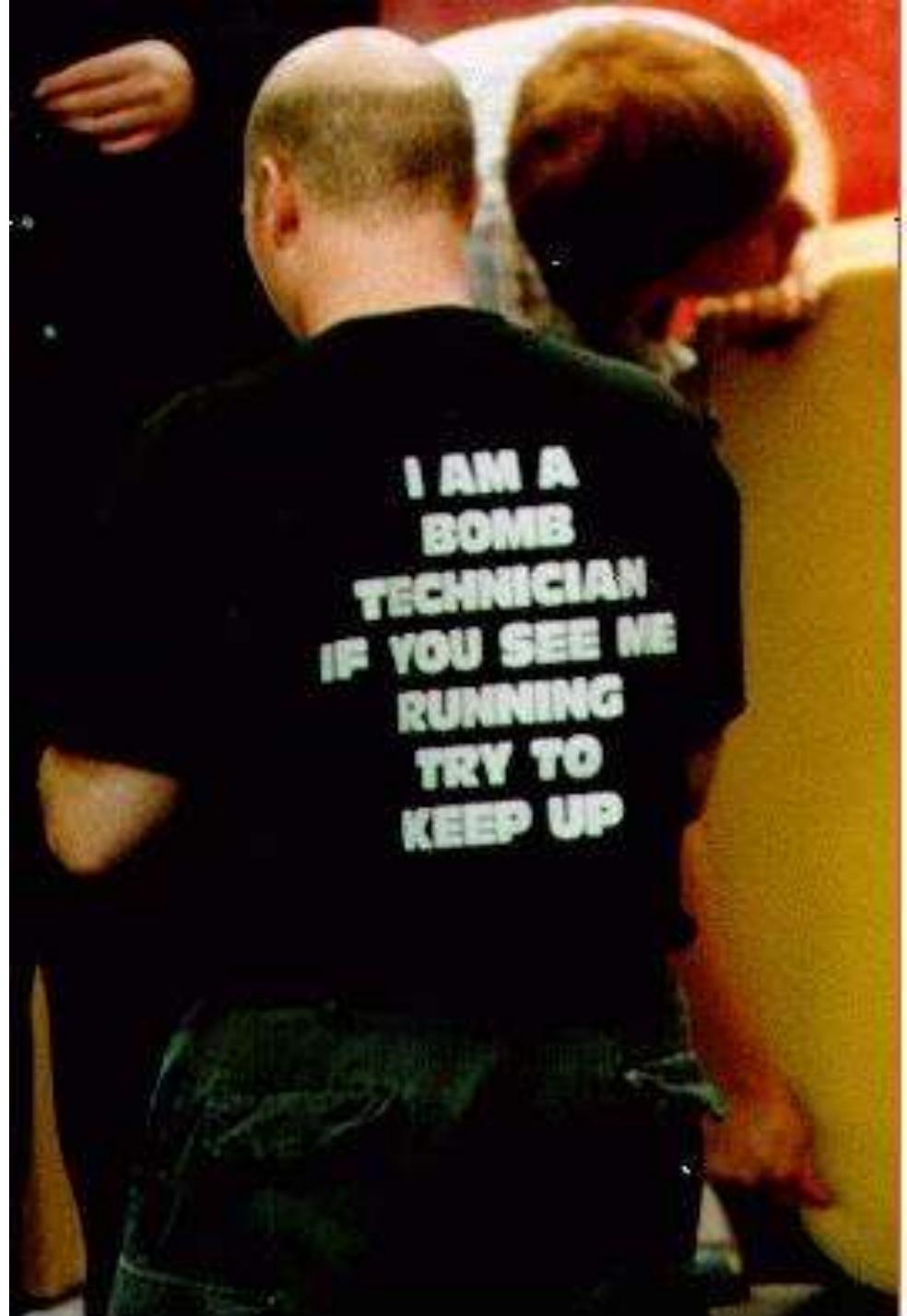
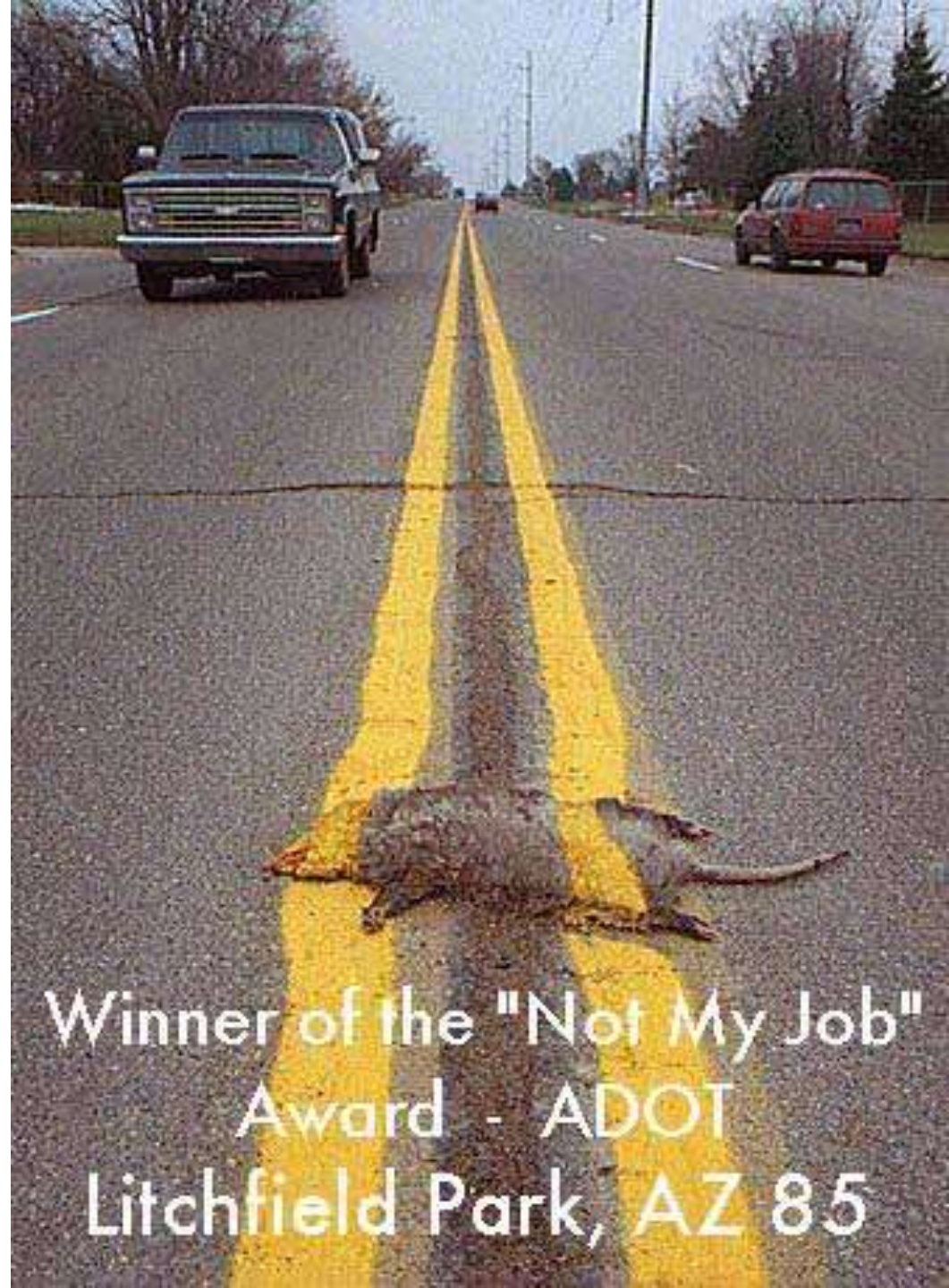# A fortune to remember
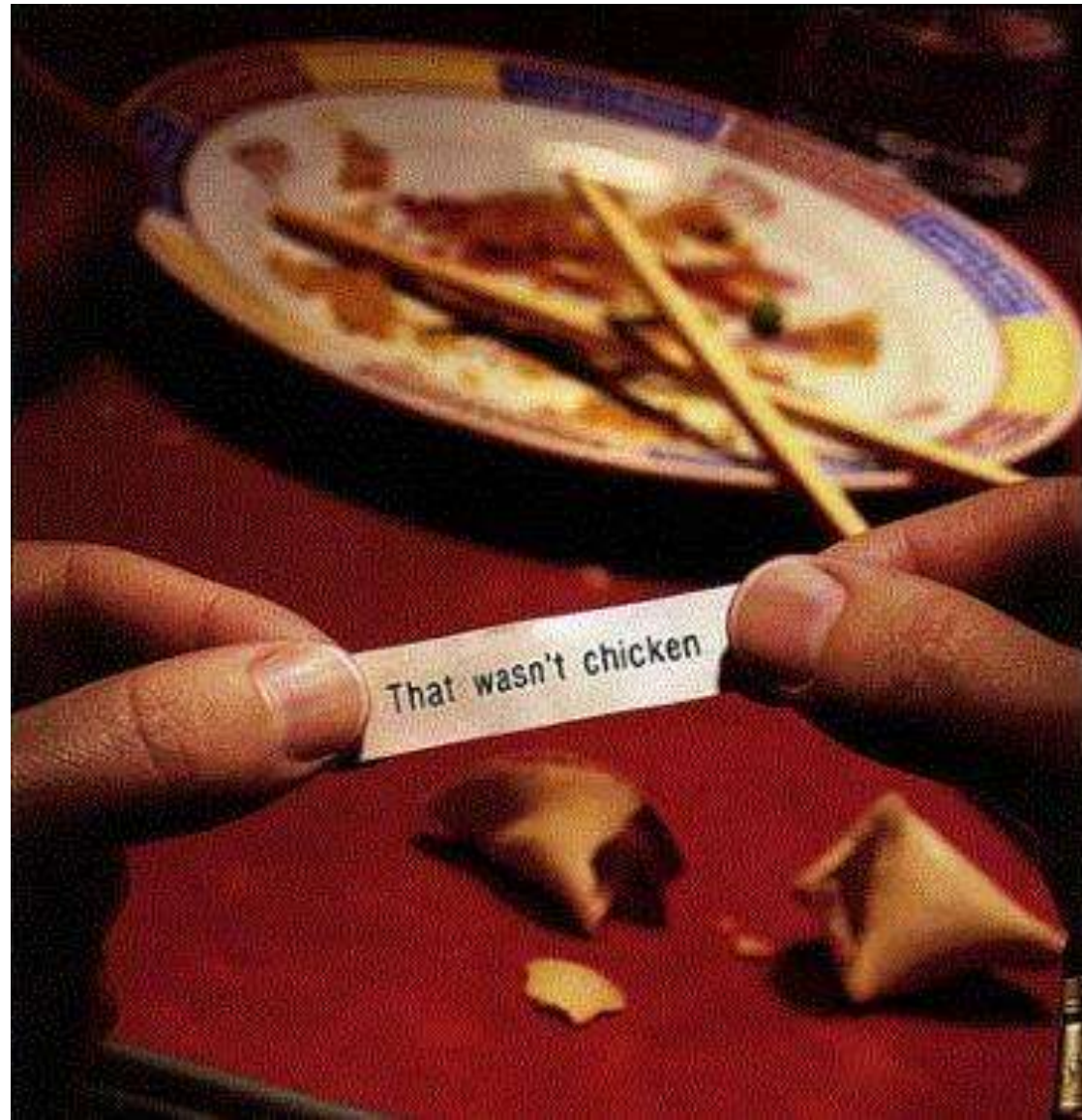
Stay off the course . . . or else!

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

Not my job

Winner of the "Not My Job" Award - ADOT Litchfield Park, AZ 85

BEST T-SHIRT DESIGN

FRIDGE MAGNET

U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

QUEEN OF THE BLONDES

QUESTIONS?

Harold Winnie
816-329-3836